METHODS AND APPARATUS FOR INDEXING
MEMORY OF A NETWORK PROCESSOR

ABSTRACT

5   A method is provided for address mapping in a network processor. The method includes the steps of (1) determining a port number of a port that receives a data cell; (2) determining a virtual path identifier and a virtual channel identifier for the data cell; and (3) creating a first index

10   based on at least one of the port number, the virtual path identifier and the virtual channel identifier. The method further includes (1) accessing one of a plurality of entries stored in a first on-chip memory using the first index; (2) creating a second index based on the accessed entry of the

15   first on-chip memory; and (3) accessing an entry of a second memory based on the second index. Numerous other aspects are provided.